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Abstract of the Disclosure

A telephone service contract registration system includes a dial detection section, a service use registration storage section, a service contract execution section, and a timer section. The dial detection section detects dial information indicating service use registration data constituted by provisional registration/regular registration information of a service contract, a use registration code, a service type code, and a subscriber number, which are supplied from a subscriber. The service use registration storage section stores the service use registration data detected by the dial detection section. The service contract execution section performs provisional registration/regular registration of the service contract on the basis of the provisional registration/regular registration information of the service contract, and executes the service contract on the basis of the service use registration data only when provisional registration/regular registration of the service contract is performed. The timer section starts a timer operation after provisional registration of the service contract which is performed by the service contract execution section, and automatically cancels the provisional registration of the service contract when a predetermined period of time has elapsed.

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Specification

Title of the Invention

Telephone Service Contract Registration System

Background of the Invention

The present invention relates to a telephone service contract registration system which allows a subscriber to try a telephone service provided by a service operation company.

For example, the system disclosed in Japanese Patent Laid-Open No. 5-344216 is a conventional system in which a service operation company for providing various telephone services for telephone subscribers (to be referred to as subscribers hereinafter) registers or cancels services. In this system, when a subscriber applies to the service operation company for a service contract, the service operation company rewrites the contract information of the subscriber, who applied for the contract, in accordance with a command from a maintenance terminal.

In such a conventional telephone service contract registration system, however, it is difficult for subscribers to understand the contents and usefulness of various services provided by a service operation company. Under the circumstances, telephone services have not become widespread yet. In addition, every time a subscriber is to perform contract

registration, he/she must make contact with the operation company. This cumbersome operation is also a factor that hinders the spread of telephone services. For these reasons, potential subscriber's demands for telephone services have not sufficiently been encouraged.

Summary of the Invention

It is an object of the present invention to provide a telephone service contract registration system which allows subscribers to freely and easily use telephone services.

In order to achieve the above object, according to the present invention, there is provided a telephone service contract registration system comprising detection means for detecting dial information indicating service use registration data constituted by provisional registration/regular registration information of a service contract, a use registration code, a service type code, and a subscriber number, the dial information being supplied from a subscriber, storage means for storing the service use registration data detected by the detection means, service contract execution means for performing provisional registration/regular registration of the service contract on the basis of the provisional registration/regular registration information of the service contract which is detected by the detection

means, and executing the service contract on the basis of the service use registration data stored in the storage means only when provisional registration/regular registration of the service contract is performed, and timer means for starting a timer operation after provisional registration of the service contract which is performed by the service contract execution means, and automatically canceling the provisional registration of the service contract which is performed by the service execution means when a predetermined period of time has elapsed.

Brief Description of the Drawings

Fig. 1 is a block diagram showing a subscriber contract service registration system according to an embodiment of the present invention; and

Fig. 2 is a flow chart showing the operation of the system in Fig. 1.

Description of the Preferred Embodiment

Fig. 1 shows a subscriber service contract system according to an embodiment of the present invention. This system is constituted by a subscriber 1 and a switching unit 2 of a service operation company to which the subscriber 1 is connected. The switching unit 2 comprises a service introduction control section 3 for introducing the contents of a service in accordance with a special dial from the subscriber 1, a voice unit 4 which is connected to the service introduction control

section 3 to announce the contents of the service to the subscriber 1 with voices, a service use registration storage section 5 for storing service use registration data consisting of a subscriber telephone number, a service name, and a use start date in accordance with the special dial from the subscriber 1, a service contract execution section 6 for performing regular contract registration and provisional contract registration for the service corresponding to the service use registration data stored in the service use registration storage section 5, a service use period monitoring section 7 for monitoring the use period of the service when the service contract execution section 6 performs provisional contract registration for the service, and a timer 8 connected to the service use period monitoring section 7 to output timer information.

The service introduction control section 3 includes a dial detection section 3a for detecting a special dial from the subscriber 1. The service contract execution section 6 includes a contract registration section 6a for registering provisional and regular contracts for a service.

The operation of the system having this arrangement will be described next with reference to the flow chart of Fig. 2. When a provisional contract for a telephone service is to be made, first of all, the subscriber 1 dials a predetermined special number in

step S100. Upon reception of the special dial number from the subscriber 1, the dial detection section 3a of the switching unit 2 notifies the service introduction control section 3 of the application for a telephone service.

Upon reception of the notification of the application for the service, the service introduction control section 3 starts the voice unit 4 to announce and introduce with voices the contents of the function of the subscriber contract service which can be provided from the switching unit 2, and the method of using the service in step S101.

In steps S102 and S103, on the basis of the voice announcements, the subscriber 1 dials a use registration code indicating the use of the service, a contract service identification code indicating the type of service, the subscriber number, and the like. These special dials are detected by the dial detection section 3a of the switching unit 2 and notified to the service use registration storage section 5. In step S104, the service use registration storage section 5 stores service use registration data consisting of the subscriber number, the service name, and the use start date.

At the same time, in accordance with the notification from the service use registration storage section 5, the service contract execution section 6

rewrites the service contract information of the subscriber in the contract registration section 6a into a provisional contract in step S105. In step S106, the service use period monitoring section 7 starts a monitoring operation. Only when the service contract information in the contract registration section 6a indicate a provisional contract, the service use period monitoring section 7 monitors a predetermined use period from the start of the service used by the subscriber, who has made the provisional contract, on the basis of timer information from the timer 8. In step S110, the service contract execution section 6 executes the service, for which the subscriber 1 has made the provisional contract, on the basis of the service use registration information stored in the service use registration storage section 5 until it is determined in step S107 that the period of the provisional contract for the service which is monitored by the service use period monitoring section 7 has elapsed. The service contract execution section 6 recognizes the service to be executed as a service based on the provisional contract from the provisional contract information registered in the contract registration section 6a.

If the service use period monitoring section 7 determines on the basis of timer information from the timer 8 in step S107 that the period of the provisional contract for the service has elapsed, the service use

period monitoring section 7 notifies the service use registration storage section 5 of the termination of the use of the service based on the provisional contract in step S108. With this operation, the service use registration storage section 5 clears the service use registration data of the subscriber who has applied for the provisional contract, and notifies the service contract execution section 6 of the cancellation of the provisional contract for the service on the basis of the notification of the termination of the use of the service. With this operation, the service contract execution section 6 clears the provisional contract information registered in the contract registration section 6a and cancels the provisional contract for the service in step S109.

If the subscriber 1 performs regular contract registration of the service in use by using a special dial during the period of the provisional contract for the service, the service contract execution section 6 rewrites the service contract information in the contract registration section 6a from the provisional contract to the regular contract in accordance with the notification of regular registration from the service use registration storage section 5, and stops the monitoring operation of the service use period monitoring section 7. That is, when a subscriber makes a regular contract within a predetermined period of a

provisional contract, service use registration data stored as the provisional contract is used as service use registration data for a regular contract, thereby allowing the subscriber to continuously use the service based on the provisional contract.

When the subscriber 1 generates a service stop request by using a special dial during the period of a provisional contract for a service, the service use registration data in the service use registration storage section 5 is cleared, and the provisional contract in the contract registration section 6a of the service contract execution section 6 is canceled, as in the case wherein the service use period has expired.

In the above embodiment, control is performed to send various notifications from the service use registration storage section 5 to the service contract execution section 6 and the service use period monitoring section 7. However, notification may be performed without the mediacy of the service use registration storage section 5. In addition, this system may include another control section having functions of performing a notifying operation of the service use registration storage section 5 and controlling it.

In addition, service contract information (provisional contract information and regular contract information) is registered in the contract registration

section 6a of the service contract execution section 6. However, such information may be stored in a section other than the service contract execution section 6, e.g., the service use registration storage section 5.

As has been described above, according to the present invention, since a subscriber can try a desired service for a predetermined period of time by performing a dialing operation to make a provisional contract, the subscriber can satisfactorily understand the contents of the service by experience before making a regular contract. For this reason, demands for new services can be encouraged, and the number of contracts for the services can be increased.

Since a provisional contract for a service is automatically terminated after the lapse of a predetermined period of time, a subscriber need not make contact with the service operation company every time he/she cancels a provisional contract. In addition, a subscriber can easily switch a provisional contract to a regular contract during the period of the provisional contract by performing a dialing operation.

Furthermore, when a subscriber applies for a service, the contents of the service are introduced by voice information in response to a dialing operation performed by the subscriber. The subscriber can receive the desired service by performing an operation based on an instruction included in the voice information. The

subscriber can therefore easily use a service by performing a simple operation.

What is claimed is:

1. A telephone service contract registration system comprising:

detection means for detecting dial information indicating service use registration data constituted by provisional registration/regular registration information of a service contract, a use registration code, a service type code, and a subscriber number, the dial information being supplied from a subscriber;

storage means for storing the service use registration data detected by said detection means;

service contract execution means for performing provisional registration/regular registration of the service contract on the basis of the provisional registration/regular registration information of the service contract which is detected by said detection means, and executing the service contract on the basis of the service use registration data stored in said storage means only when provisional registration/regular registration of the service contract is performed; and

timer means for starting a timer operation after provisional registration of the service contract which is performed by said service contract execution means, and automatically canceling the provisional registration of the service contract which is performed

by said service execution means when a predetermined period of time has elapsed.

2. A system according to claim 1, further comprising contract registration means in which provisional contract information and regular contract information of a service are registered by said service contract execution means, the provisional contract information registered in said contract registration means being cleared in accordance with a time-up output from said timer means.

3. A system according to claim 1, wherein when regular registration information of a service contract is detected by said detection means during a predetermined period counted by said timer means, said service execution means switches provisional registration of the service contract to regular registration, and continues the same service for the subscriber for which provisional registration has been switched to regular registration.

4. A system according to claim 1, further comprising voice guidance means for guiding contents of a service and a method of using the service to a subscriber by voice announcements.

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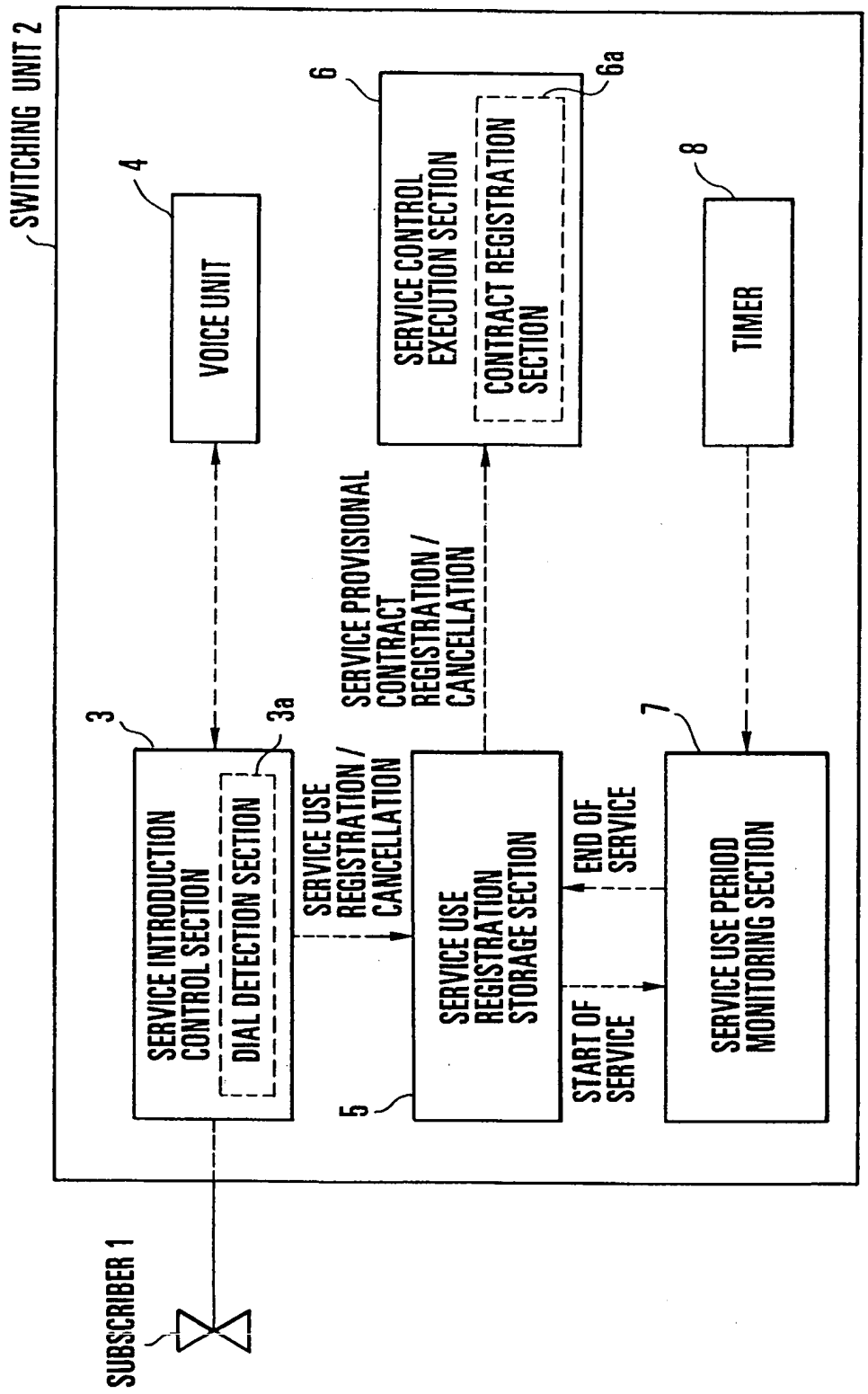
SWITCHING UNIT 2
SUBSCRIBER 1
SERVICE INTRODUCTION CONTROL SECTION
DIAL DETECTION SECTION
3
3a
VOICE UNIT
4
SERVICE USE REGISTRATION / CANCELLATION
SERVICE USE REGISTRATION STORAGE SECTION
5
SERVICE PROVISIONAL CONTRACT REGISTRATION / CANCELLATION
SERVICE CONTROL EXECUTION SECTION
CONTRACT REGISTRATION SECTION
6
6a
START OF SERVICE
END OF SERVICE
SERVICE USE PERIOD MONITORING SECTION
7
TIMER
8

FIG. 1

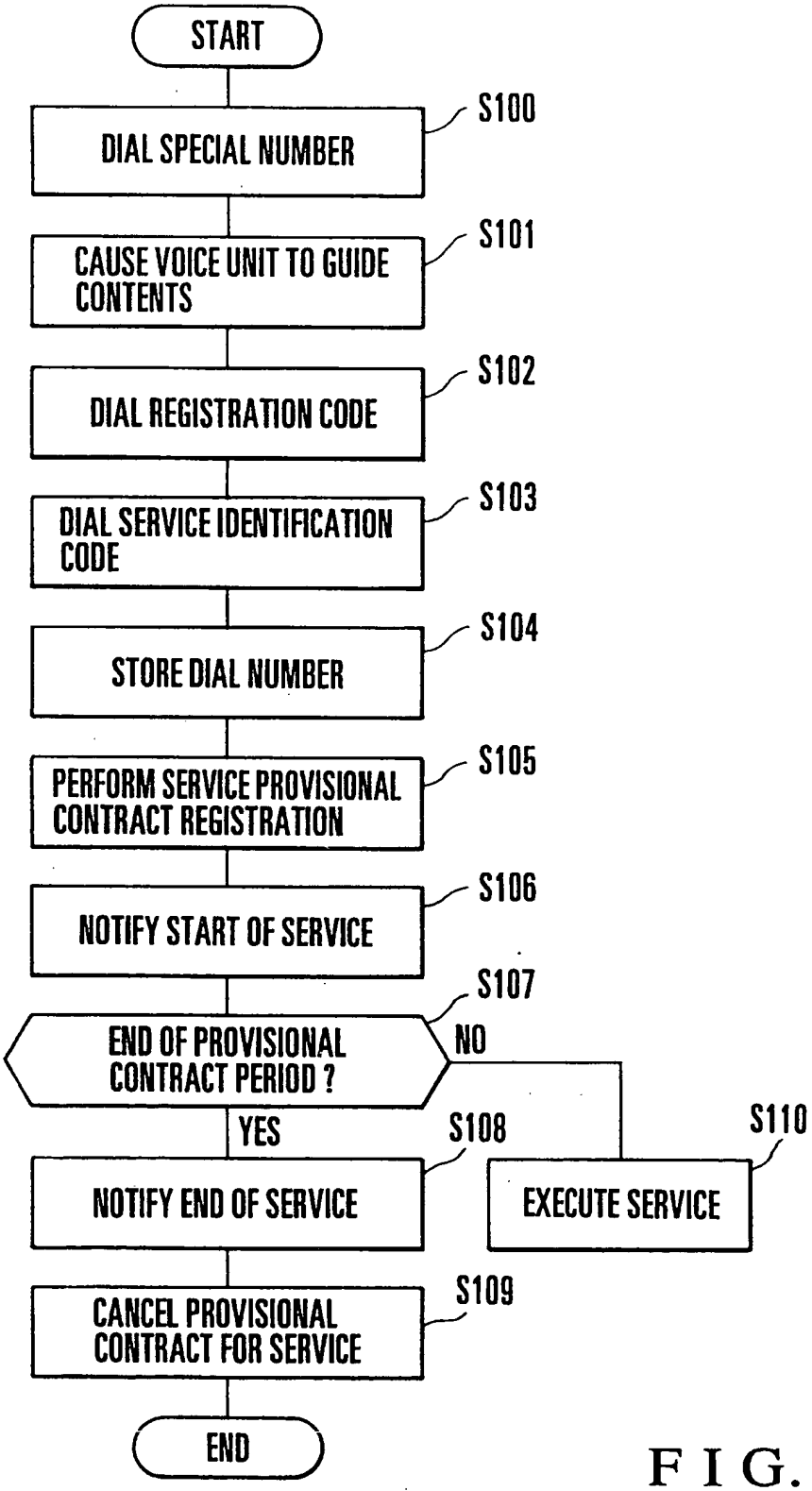

FIG. 2

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